From: Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>
Sent: Monday, June 17, 2019 1:28 PM
To: Cathy Marcinkevage - NOAA Federal
Cc: Brian Ellrott
Subject: Re: WR TDM Consistency

Hi Cathy,

I'm fine with the proposed changes. If I had my time machine working I'd suggest we focus on the median, rather than the mean, and then we could use the first and third quartiles rather than the standard deviation.

Do you need me to calculate the standard deviation for the Anderson modeling results?

Evan

On Mon, Jun 17, 2019 at 1:06 PM Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov> wrote:

Background

Recs Performance Metrics for TDM:
● Tier 1 – Maximum (39%); Average (6%); Median (2%); Minimum (0.4%); Std. Dev (+/-9%)
● Tier 2 - Maximum (46%); Average (15%); Median (9%); Minimum (1%); Std. Dev (+/-16%)
● Tier 3 - Maximum (77%); Average (34%); Median (24%); Minimum (6%); Std. Dev (+/-31%)
● Tier 4 – Appropriate performance metrics will be addressed under "Drought and Dry Year Actions" consistent with the "Governance" section of this Proposed Action

Our Effects Analysis (example for Tier 1):
• Reduced survival probability (mean temperature dependent mortality of 5 percent (Anderson) and 6 percent (Martin); widest range of 25 and 75 percentiles for 2 different models is 0 to 6 percent).

I&S (example for Tier 1, showing the mean):
5% - 6% temperature dependent mortality

ITS (example for Tier 1):
Temperatures higher than 53.5°F would result in reduced survival (mean temperature- dependent mortality of 5 percent [Anderson] and 6 percent [Martin]; widest range of 25 and 75 percentiles for 2 different models is 0 to 6 percent).
Shasta operations remain consistent with performance metrics described in in Section 2.5.2… (Performance Metrics)

So you see the mix of things. I propose the following to address this (changes in **bold**):

Recs Performance Metrics for TDM (**nothing to change here)**:
● Tier 1 – Maximum (39%); Average (6%); Median (2%); Minimum (0.4%); Std. Dev (+/-9%)
● Tier 2 - Maximum (46%); Average (15%); Median (9%); Minimum (1%); Std. Dev (+/-16%)

● Tier 3 - Maximum (77%); Average (34%); Median (24%); Minimum (6%); Std. Dev (+/-31%)
● Tier 4 – Appropriate performance metrics will be addressed under "Drought and Dry Year Actions" consistent with the "Governance" section of this Proposed Action

Our Effects Analysis (example for Tier 1):
• Reduced survival probability (mean temperature dependent mortality of 5 percent (Anderson) and 6 percent (Martin); **the standard deviations are +/-Y and +/-Z**).

I&S (example for Tier 1, showing the mean):
5% - 6% temperature dependent mortality **with the standard deviations are +/-Y and +/-Z**.

ITS (example for Tier 1):
Temperatures higher than 53.5°F would result in reduced survival (mean temperature- dependent mortality of 5 percent [Anderson] and 6 percent [Martin]; **the standard deviations are +/-Y and +/-Z)**.
Shasta operations remain consistent with performance metrics described in **BA Section 4.10.1.3.3 (Upper Sacramento** Performance Metrics).

Whaddya think?

I can make many of these changes if you agree.

Slightly related....I guess we need to make new rows for SR, STH, and GS that reflect the PA revisions, as I did for WR, right?

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Evan Bing Sawyer,
Natural Resource Management Specialist
NOAA Fisheries West Coast Region
U.S. Department of Commerce
Office: (916) 930-3656
Evan.Sawyer@noaa.gov
www.westcoast.fisheries.noaa.gov